U.S. EPA BASE STUDY
STANDARD OPERATING PROCEDURE FOR
BUILDING RECRUITING

Previously submitted date: November 1996

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N:\SOP\2000\RECRUIT.DOC

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1.0 OBJECTIVE

Building recruiting for the BASE study is defined by a random selection of buildings within cities of population exceeding 100,000 inhabitants and located in selected climatic regions of the United States. Ten climatic regions have been defined for this study by the Environmental Protection Agency (EPA). The Indoor Environments Division (IED) of the EPA selects the regions in which building studies are to be conducted in each season (summer or winter).

2.0 GENERAL PROCEDURES

2.1 SELECTION OF CITIES

A list of eligible cities with populations exceeding 100,000 inhabitants has been developed and defined in the "Building Recruiting for the Building Assessment Survey and Evaluation (BASE) Program"[1]. These eligible cities are divided among the ten climatic regions defined by EPA.

Prior to each study, EPA designates those regions from which the study cities are to be randomly selected. The first step in the random process is to number the alphabetized list of cities within the designated region from 1 to "n". Three random numbers are then obtained using a random number generation function on a scientific calculator. The third random number is multiplied by the total number of cities, "n", and then rounded to the nearest integer. The city with the corresponding assigned number is selected as the study city.

This process is repeated for each region to be studied.

2.2 RECRUITMENT CALLING LIST

Potential study buildings are contacted through a cold-calling process to identify if businesses meet BASE eligibility requirements. A nation-wide telephone database, *SelectPhone* by ProCD[2] contains information compiled from telephone white pages and and includes business names, addresses, zip codes, telephone numbers, and Standard Industrial Classification (SIC) codes. A listing of all businesses and associated information is compiled for the study city, exported to a file, and then randomized.

[1] *Building Recruiting for the Building Assessment Survey and Evaluation (BASE) Program*. EH&E report to EPA on Work Assignment III-2, Contract No. 68-D2-00666.

[2] ProCD Inc., Danvers, MA 01923

2.2.1 Creating a Business Listing File Using ProCD SelectPhone

Select business listings

- Before you use the phone CD, go into File Manager and set up a folder for the new study with sub files: n:\1studies\YYseason\build_rlt\recruit\data.
- Load the appropriate CD for the region of the target city and open the *ProPhone for Windows* icon. This will bring you to the *Tag Manager* window. (Note: For installation of or assistance with the *ProCD* Application software, contact the Librarian or the MIS specialist).
- Under *File*, go to *Open Database*. The computer will read the CD and ask which database to choose; choose *OK* to open the *Available Database.*
- This will bring you into the database containing all listings for that region. In the **City** cell, type the target city's name.
- The **State** cell will prompt you with the names of all the states for that region; choose the appropriate state.
- Choose *ListMagic* under *Search* and click to limit the list to business listings only,
- Click the "doggy" icon to *fetch* all of the listings that apply to the parameters you've just created.
- The listings for all businesses within the selected city and state will be tabulated in alphabetical order.

Exporting listings to file

- Once the listings have been tabulated, you need to create a *.dbf* (database) file for exporting. Under *File,* choose *Export,* then *All Matching Entries*. Select the database (.DBF) option. Export to n:\1studies\YYseason\build_rlt\recruit\data\. Save file as (*.dbf). Change the filename from *export.dbf* to *<city name>.dbf.*
- **Do not disturb the computer until this process has been completed.** This process usually requires a few hours as each city has tens of thousands of listings.
- Click OK and the listings will be exported.

2.2.2 Attaching the *.dbf File

First, go to a computer with at least 16 MB of RAM, preferably 32 MB. [Use Marrena's computer.] Make sure that no software applications are open. Open Microsoft Access. Under *File*, select *New Database*. Name the database after the city (e.g. Denver.mdb) and save it in the appropriate directory.

Under *File*, select *Attach Table*. From the dialog box that pops up, select *dBASE IV*. In the next dialog box, select the ProPhone file (it will be a *.dbf file). There should now be a table showing in the table listings with a black arrow and *db* next to it.

2.2.3 Generating the Table with Random Numbers

Under *File*, select *New*, and then *Table*. This will bring you to the Field Structure screen; enter the following seven fields:

1. Random #
2. Full Name
3. Address
4. Town
5. State
6. Zip
7. Telephone

The order of the fields should be the same as the order of the fields in the *.dbf file. The data type should all be *Text*, except for the *Random #* field, which should be *Number*. Change the *Field Size* values for *Full Name* and *Address* from the default value of 50 to 255. (To change settings for individual fields in Access, highlight the field in the top half of the dialog box, and the field information will appear below). Change the *Default Value* for *Random #* to =RND(). Save the table as <*city name*> *Randomized*. Do not create a primary key.

Open the first table (the attached *.dbf file). Go to the last record (click on the button with the ">|" on it). Copy all the records in this table by moving the mouse to the top of the first column, where the column name appear in a gray box, until the cursor turns into a black arrow pointing down. Click on the mouse so the entire column is highlighted. While still holding down the mouse button, drag the mouse over to the right until all the columns are highlighted. Under *Edit*, select *Copy*. There will be a wait of a few minutes while all the columns are copied. When the copying is done, minimize the table (do not close the table or there will be an additional wait). Open the new table *<city name> Randomized*. Highlight the last six columns in the same manner described above. Do *not* highlight the first column, *Random #.* The last six columns should be the same order as the columns in the *.dbf file. Under *Edit*, select *Paste*. Again, there will be a wait of a few minutes (depending on the amount of RAM memory). When the pasting is done, the first column should contain random numbers. Check to make sure the number of records in this table is the same as the number of records in the attached table.

2.2.4 Generating the Call List Table

Close all tables. The main database screen should appear with the tables list on top. (If it is not on top, click on the tables tab on the left side of the screen). Highlight the *<city name> Randomized* table (but do not open it). Under *Edit*, select *Copy*. Under *Edit*, select *Paste*. A dialog box should appear entitle *Paste Table As*. For the table name, type in *<city name>, <state> Call List*. Below, select *Structure Only* and click on *OK*. This will create a third, empty table. Highlight the new table name in the main database screen and click on the *Design* button. Change the first field name from *Random* # to *Call Number*. Change the Data Type to *Counter*. Save and close the table.

Open the *<city name> Randomized* table and highlight the *Random* # column. Under *Records*, select *Quick Sort*, and then *Ascending*. Following the column copying procedure above, copy the last six columns. Do not copy the *Random* # column. The copying will take a few minutes. Minimize the *<city name> Randomized* table (do not close or there will be an additional wait). Open the *<city name>, <state> Call List* table, highlight the last six columns (not the Call Number column), and paste. This procedure will take a few minutes. When done, check to make sure the number of records is the

same in both tables. Close the <*city name*> *Randomized* table. Open the <*city name*>, <*state*> *Call List* table. Under *File*, select *Print Preview*. Adjust the left and right margins to 0.5 inches. If the table is still too wide to fit on one page, close print preview and adjust the column widths in the table. Next, format *the telephone* # column under *design*. In the format field, type (000) 000-0000 and save. Once the table is the proper width, save it.

Print out the first 30 to 50 pages of the call list. This randomized table is in final format and is then used to begin the building recruiting process.

2.3 BUILDING RECRUITING

2.3.1 Overview

A *recruiter* is hired to telephone the businesses on the randomized calling list in sequential order. Any "leads" the *recruiter* obtains on potentially eligible study buildings are passed on to a *technical caller*. The *technical caller* further investigates the eligibility of the building and answers any questions a building manager may have about the BASE study. Buildings fulfilling these basic criteria are then scheduled for an on-site Preliminary Visit conducted by EH&E.

Eligible buildings are recruited until EH&E schedules Preliminary Visits for twice the designated number of buildings set by EPA for a study city. Extra Preliminary Visits are scheduled to help randomize the final building selection and to provide back-up building options in case one or more buildings are deemed ineligible during the on-site evaluation. The details of this process are as follows.

2.3.2 Recruiter

- A recruiter contacts a business using the randomized business list for the study city and initiates a Preliminary Caller Form (Appendix A). This form is used to document all contact with the building and to track the building throughout the recruiting process.

- The recipient of the call is asked if their business is located in an office building. If "no", the recruiter ends the call. If "yes", the recruiter continues the call with a brief explanation of the BASE study and then proceeds with further eligibility questions (Appendix B).

- The recruiter asks if there are 50 or more occupants in the building. If "no", the recruiter ends the call. If "yes", the recruiter asks for the name, phone number, and fax number of the building manager.

- A call is then made to the building manager. If the building manager is unavailable after two calls, the recruiter faxes an information packet on the study to him/her (Appendix C).

- Upon contacting the building manager, the recruiter describes the objectives of the study, verifies answers to preliminary eligibility questions, and asks more detailed questions about general building characteristics (number of stories, age of building, etc.). If the preliminary eligibility criteria (office building and >50 employees) is not met, the recruiter explains the reasons why and ends the call.

- If a building meets the preliminary eligibility criteria and building management is interested in the BASE study, the recruiter passes the Preliminary Caller Form to the *technical caller*.

2.3.2 Technical Caller

- A Technical Follow-up Call Form (Appendix D) is used by the technical caller to continue to record and track information related to the building's recruitment process. The technical caller is responsible for verifying information obtained by the recruiter. He or she gathers more specific information on the building and the ventilation system from the building manager and provides more detailed information about BASE. The technical caller emphasizes the confidential and non-regulatory nature of the study and the benefits of being a volunteer building. The building

manager is encouraged by the technical caller to ask questions about any aspect of the BASE study, including how the study is conducted, the details of the study components (HVAC measurements, environmental sampling, and questionnaire), and how data is processed and utilized.

- A technical call will end if: information on the HVAC system reveals the building to be ineligible; the building manager is not interested in proceeding with the study; or any other reason why the building should not participate in the study.

- If the building meets the eligibility requirements and both the building manager and the building owner are interested in participating in the study, an on-site Preliminary Visit is scheduled. The technical caller explains to the building manager that this is a screening visit and an information packet will be sent in preparation for the visit. The Preliminary Visit packet, accompanied by a confirmation letter, contains an EPA confidentiality letter, BASE flyers to inform occupants, and other informative materials (Appendix E).

2.4 REPORTING TO EPA

In order to provide EPA with a summary of the recruiting process, a statistical report (using Microsoft Excel) is compiled from the recruiter and technical call forms. Specifically, each business listing from the original randomized list is assigned a number and tracked from the initial cold call through the completion of a field study, or the farthest step into the recruiting process that the building achieved. The statistical report is in the form of a matrix that incorporates the many scenarios that may occur over the life of a building prospect (Appendix F).

APPENDIX A

PRELIMINARY CALLER FORM

Recruiter_____ Date___/___/___

Tenant_____ Phone (___)_____

Address_____

Contact with Tenant

Contact w/tenant established? NO YES	Tenant Previously contacted? NO YES	Tenant not interested? NO YES
( ) hung up	Office space according to tenant? NO YES	( ) wary of EPA
( ) no answer	# employees according to tenant?_____	( ) tenant concerns
( ) left message (# msg._____)	Bldg. mngr./owner identified? NO YES	( ) liability concerns
( ) fax/modem #		( ) no time to participate
( ) wrong number		( ) other (define)
( ) number disconnected		

Contact with Building Management

Manager/Owner_____ Company_____

Phone # (____)_____ Fax #(____)_____ Faxed___/___/___

Bldg. mngr./owner contacted? NO YES	Bldg. mngmt. not interested? NO YES	HVAC Information Type of system
# employees according to bldg. mngmt.?_____	( ) wary of EPA	( ) VAV
	( ) tenant concerns	( ) Heat pumps
	( ) liability concerns	( ) Closed loop w/chiller
	( ) no time to participate	( ) Other (define)
	( ) other (define)	# units_____

General Information

Res. units in bldg.? NO (0) YES (1)	Age of Bldg. _____	# Stories _____	Square Footage _____

Notes

APPENDIX B

RECRUITER INFORMATION:
BASE DESCRIPTION AND ELIGIBILITY QUESTIONS

Building Assessment Survey and Evaluation Study (BASE)

Background and Description

BASE is a study being undertaken by the EPA to define the status of existing office buildings with respect to determinants of indoor air quality (IAQ) and occupant perception.

The EPA BASE program is a research project, not a regulatory program. Participation in the BASE study is voluntary and confidential. EPA's goal is to sample IAQ in commercial buildings selected from all parts of the country so that it can determine typical conditions in these buildings. Over the next 3 to 5 years, the EPA's goals for the BASE study are to survey 100 to 200 office buildings. These studies will be done at no cost to the owner, manager, or tenants. An IAQ study of this nature would cost the average building owner $30,000.00.

Once the program is completed, the EPA will develop a public database of current IAQ standards and the agency will be better able to educate the public about this important issue.

Steps to becoming a volunteer building for the BASE study

If a building is deemed eligible as a volunteer building as per the EPA criteria, the following steps are taken:

1. **Preliminary Visit.** The PV is a screening visit intended to achieve and verify the suitability of the building for the BASE study. Two EH&E scientists conduct a walkthrough of the building to gather information about the mechanical systems and occupant use of office space. Selected buildings form this visit are scheduled for the field sampling week.

2. **Field Sampling Week.** EH&E sends out 4 field team members to perform a complete characterization of the building. This process includes a description and measurements of environmental conditions, measurements of ventilation rates, and a brief, voluntary questionnaire given to occupants of the study area. All techniques to collect date on the building were designed to be quick and unobtrusive within the one work week schedule.

Questions to be asked by the Recruiter

- Is your business in an office building?
- How many employees work in your building?
- Who is the building manager and how can he/she be reached?
- Are there any residential units in your building?
- How many stories is your building?
- How many square feet is your building?

APPENDIX C

FAX INFORMATION PACKET

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

Dear Potential BASE Study Building Owner/Manager:

The Building Assessment Survey and Evaluation (BASE) program is a non-regulatory, information-gathering program to develop baseline data on the quality of indoor air in office buildings across the country. The purpose of the study is three-fold:

- Research and explore indoor air quality (IAQ) in public and private office space in order to define the status of IAQ and occupants' perceptions;

- Establish a database of IAQ information to be used by researchers; and

- Develop guidance for property owners and managers on building operations and maintenance activities and the impact of such activities on IAQ.

The buildings in the study are randomly selected. However, they must meet specific criteria regarding occupancy, and the heating, ventilation, and air conditioning configuration. The confidentiality of the building and the occupants will be maintained throughout the study. No names are associated with the occupant questionnaires. Building level data collected by the field team are coded to protect the identity of the building. Information is transferred to the EPA database using only the numerical codes which are not associated with the building's name. The information is linked to a state location, not the city. The purpose for the linkage to a state is to allow for analysis of data based on climatic variations across the country.

Building specific information is discussed only with the building manager. After the BASE sampling season, data from the buildings will undergo thorough quality assurance processing. Once this is completed, a summary of a building's data will be available only to the building owner/manager. As stated before this is a non-regulatory program. Information beyond the scope of the study will not be reported to other agencies and will only be discussed with the building management.

Environmental Health & Engineering (EH&E) of Newton, MA is a contractor of the U.S. Environmental Protection Agency. They have been contracted to conduct the BASE program to collect information on IAQ in randomly selected buildings across the United States. Please feel free to discuss any aspect of the program or building information with EH&E or myself. My number is 202-233-9057.

Sincerely,

Susan E Womble

Susan E. Womble
BASE Program Manager
Indoor Air Division
US Environmental Protection Agency

BUILDING ASSESSMENT SURVEY & EVALUATION (BASE) STUDY

QUESTIONS & ANSWERS

What is the BASE program?

BASE, the Building Assessment Survey & Evaluation program, is a study being undertaken by the Environmental Protection Agency (EPA) to define the status of existing office buildings with respect to determinants of indoor air quality (IAQ) and occupant perception.

The EPA BASE program is a research project, not a regulatory program. Its goal is to sample IAQ in commercial buildings selected from all parts of the country so that the EPA can determine typical conditions in these buildings. These studies will be done at no cost to the owner, manager, or tenants.

Once the program is completed, the EPA will be better able to educate state and local governments, engineers, building owners and managers, building occupants, and the public about this important issue.

Environmental Health & Engineering, Inc. (EH&E), a private firm specializing in indoor air quality, has been contracted by the EPA to conduct the building evaluations. [redacted] and your building were selected by a completely random process.

Why is EPA studying indoor air quality?

Although the quality of outdoor air has been the focus of much discussion and research, until relatively recently, little attention has been directed toward IAQ. Research indicates that we spend about 90% of our time indoors and that air within homes, offices, and other buildings may be more polluted than outdoor air in large, industrialized cities. EPA designed the BASE program to broaden our understanding of IAQ.

How many buildings will EPA study?

EPA plans to study three commercial buildings in the [redacted] metropolitan area in the month of September. The entire BASE study will include evaluation of approximately 100 office buildings nationwide.

What will the study involve?

The study will include an examination of the overall building design, brief interviews with building facility workers, measurement of various indoor air components, and completion of a short, confidential questionnaire by selected building occupants. EPA has designed the procedures to be quick and unobtrusive. Measurement devices will be in place for only three days and the entire evaluation for each building in the BASE study will be completed during one work week in September.

What types of questions are in the occupant's questionnaire?

Many items in the questionnaire ask the occupants about their workplace environment. For example, there are questions about lighting, carpeting, furniture, and temperature in their offices. Other items ask about the occupants' health and any discomfort they may experience, such as headaches and sore throats. Because many of these symptoms may or may not be associated with IAQ problems in the building, the questionnaire also includes items about work activities and responsibilities outside of work.

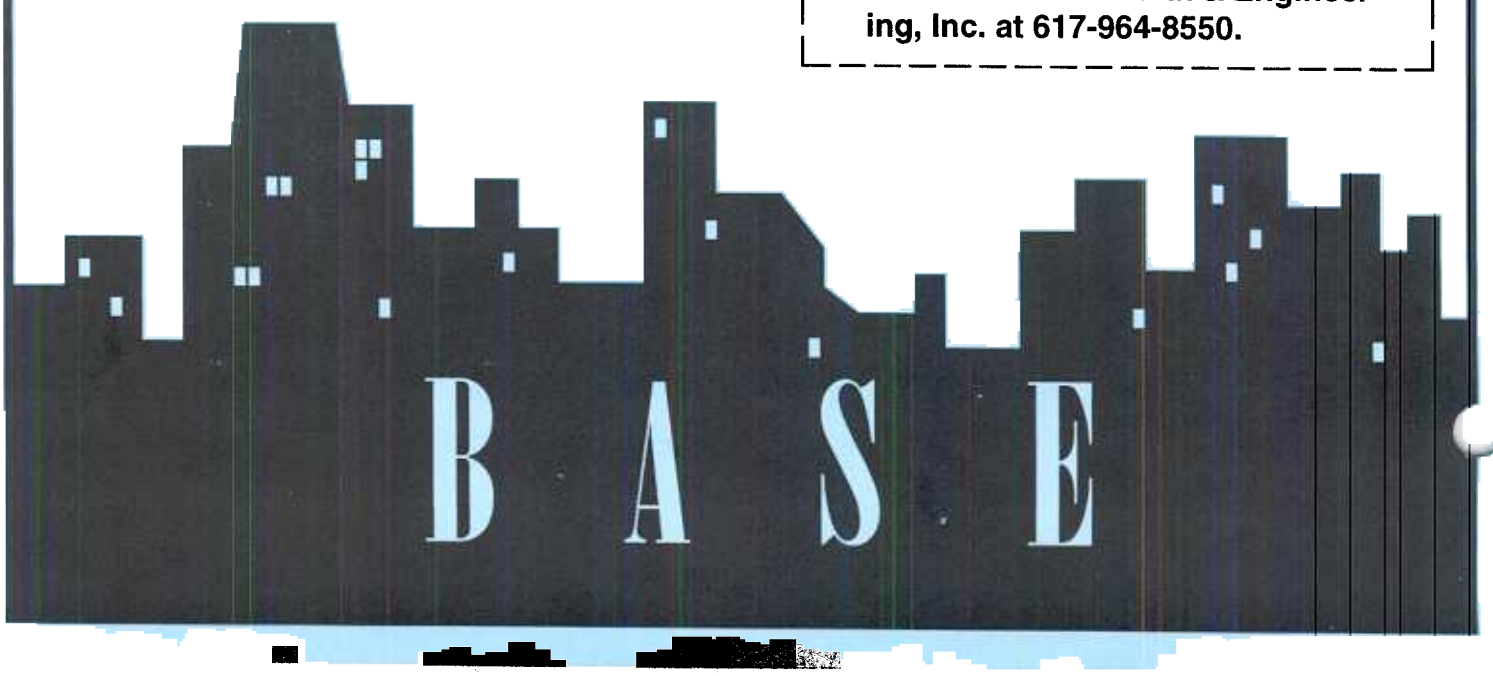
Do all the tenants or occupants in our building have to participate?

No, but a high level of participation will increase the level of success for the BASE study. EH&E will obtain explicit approval from the occupant of each private office before any testing begins; completion of the occupant survey is voluntary.

How will the study results be used?

The results will be used by the EPA to improve methods for sampling IAQ, to educate the public about IAQ issues, and to determine questions for future indoor air research. All of the data from the BASE study will serve as a source of information about current quality of indoor air in office buildings all across the country.

Interested in learning more about the BASE study? Please contact Mark Carpenter or Lynda Davis of Environmental Health & Engineering, Inc. at 617-964-8550.



From *The New York Times*, Tuesday, March 15, 1994

Government to Study Quality of Indoor Air

By TIM HILCHEY

CONCERNED that poor indoor air quality is adversely affecting human health and productivity, the Federal Environmental Protection Agency is studying the general quality of the air in the nation's buildings.

Susan E. Womble, who is helping to coordinate the Building Assessment Survey and Evaluation project for the agency's Office of Radiation and Indoor Air, said about 200 "sick" and "healthy" buildings would be examined in the next three to five years.

Researchers will try to determine what substances are present in office air, will interview building occupants and examine how building design and heating, ventilation and air-conditioning systems affect air quality.

The results will be used to create a computer data base that can serve as a baseline for further research. Independent researchers are also being encouraged to adopt the agency's protocols and to contribute to the data base, Ms. Womble said.

Although many studies point to poor air quality as the culprit, there is no consensus on the causes of so-called sick-building syndrome.

What scientists agree on is that many indoor air pollutants — volatile organic compounds, man-made mineral fibers, auto emissions and residue from modern building materials, among others — contribute to a problem that largely results from the trend toward more energy-efficient buildings, whose recirculated air retains pollutants.

The World Health Organization estimates that excessive health complaints related to indoor air quality are present in up to 30 percent of new and remodeled buildings worldwide.

Symptoms associated with sick-building syndrome include sneezing or coughing; watery eyes; headaches; eye, nose or throat irritation; dry or itchy skin; nausea and dizziness; fatigue; difficulty in concentrating, and sensitivity to odors.

In some cases, symptoms are temporary, possibly related to outdoor conditions like airborne pollen. But in buildings where health complaints persist, the problems are most likely internal ones, researchers say. They hope the data base will help them to diagnose problems, improve building design and prevent problems.

Marian C. Marbury, an environmental epidemiologist with the Minnesota Department of Health who has written extensively on sick-building syndrome, said she was pleased that the E.P.A. was developing an air-quality data base, but she believes more needs to be done.

"People are being forced to act to address health problems without having any reasonable scientific basis for their actions," she said. "It seems to be ridiculous for this to be such a large problem, and yet nobody in the United States is funding an epidemiologic study that really looks at a large number of buildings."

APPENDIX D

TECHNICAL FOLLOW-UP CALL FORM

Technical Follow-up Call

Call contact when?_____

Recruiter_____ Tech. Caller_____ Recruitment #_____

Tenant_____ SIC Code_____

Address_____ Phone_____

Owner/Manager_____

Address_____

Phone_____ Fax_____

Selling Points

- EPA-contracted study on IAQ in *(state)* during *(month)*. Building was **randomly** selected for this study.
- **Goal** of BASE is to survey 150-300 buildings. Data gathered will be used to **develop a database** *re.* current IAQ conditions.
- Everything is **confidential.**
- The study will be completed in 1 work week. It includes: study of the building; **brief (15 min)** employee questionnaire, given only to occupants of study area; talking to maintenance workers; measuring **ventilation rates** and **concentrations of indoor air pollutants.**
- BASE team is only 4 people and very **unobtrusive.**

  Personal participation includes: talking with BASE study coordinator during **half-day PV**, explaining and demonstrating the building's mechanical systems and work areas.

Notes

Any questions about BASE?

_____
_____
_____
_____
_____
_____
_____

Interest: No___ Yes___

If no, why?

_____
_____
_____
_____
_____
_____
_____

Building Description:

% office space____ % res. space_____

% laboratory_____ # full-time emp._____

Age of bldg._____ # stories___

Square footage_____

APPENDIX E

PRELIMINARY VISIT PACKET

To: Tenants of **YY**
From: **YY**, Building Administrator
Re: EPA Indoor Air Quality Research Study
Date: **YY**

The Environmental Protection Agency (EPA) will be conducting a study, the Building Assessment and Survey Evaluation (BASE), to evaluate indoor air quality in several office buildings in the **YY** metropolitan area during **YY** of 1996. Our building has been randomly selected as a possible participant for this study.

During the week of **YY**, two individuals from the company contracted by EPA to do this study will be conducting a preliminary evaluation of the building. The purpose of this evaluation is to determine whether or not our building meets the design criteria necessary to participate in the EPA BASE study. Your offices may be visited as part of this preliminary visit, but this visit should not interfere with your workday or that of your co-workers.

Attached is a flier that answers many of the questions that you may have about the EPA BASE study. If our building is selected for this study, the collected information will be part of a database about indoor air quality in office buildings from all across the country. I would appreciate your cooperation during this preliminary evaluation.

YY (DATE)

YY (ADDRESS)

Dear **YY:**

We want to thank you for your willingness to participate in the EPA BASE study, a nationwide study designed to evaluate indoor air quality in office buildings. Based on your discussion with **YY** today, we have scheduled a meeting with you for **YY (DAY), YY (DATE)** at **YY** am.

The purpose of the preliminary visit is to determine whether your building meets all of the design criteria necessary to qualify for the EPA study. We have enclosed some information materials for your review. The first is a memo addressed to the tenants of the **YY** that advises them about the Preliminary Visit. We have prepared this memo so that you can print it on your own letterhead, if you so choose. We have also included 50 copies of a flier describing the EPA BASE Study that can be distributed to the occupants. A copy of an article published in *The New York Times* that discusses the BASE study is included for your reference. Also, a letter from the EPA BASE Program Manager has been provided to address issues regarding data confidentiality and availability. Finally, the check list for the preliminary visit represents some of the items we would be reviewing and discussing during the preliminary visit.

Again, we appreciate your willingness to participate in this EPA study. If you have any questions, please do not hesitate to contact me.

Sincerely,

Brian Baker
BASE Project Manager

Enclosures: Memo for building occupants
50 fliers describing BASE Study
Reprint of NY Times article on BASE study
EPA letter regarding data confidentiality and availability
Check list for preliminary visit

From *The New York Times*, Tuesday, March 15, 1994

Government to Study Quality of Indoor

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or

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Sincerely,

Susan E Womble

Susan E. Womble
BASE Program Manager
Indoor Air Division
US Environmental Protection Agency

Environmental
Health &
Engineering, Inc.

CHECK LIST OF BUILDING INFORMATION FOR PRELIMINARY VISIT

The purpose of the Preliminary Visit is to characterize the building and select the Study Area for the U.S. EPA BASE Study. We thank you for all the time that you have already spent preparing for this visit. Listed below are some of the topics we would like to discuss during the visit. Assembling the following information and materials would greatly facilitate our meeting:

- Building floor plans and layouts such as fire escape plans, HVAC mechanical plans, and plans depicting the building foot print.

  Information describing the operation of the HVAC system as well as any corresponding maintenance schedule.

  Information regarding occupancy levels through all areas of the building.

- Locations of office vs. non-office space.

  Information on types of construction for the interior and exterior architecture.

- Locations and times of renovations occurring within the last 3 years. (carpeting, roofing, partitions, painting, etc.)

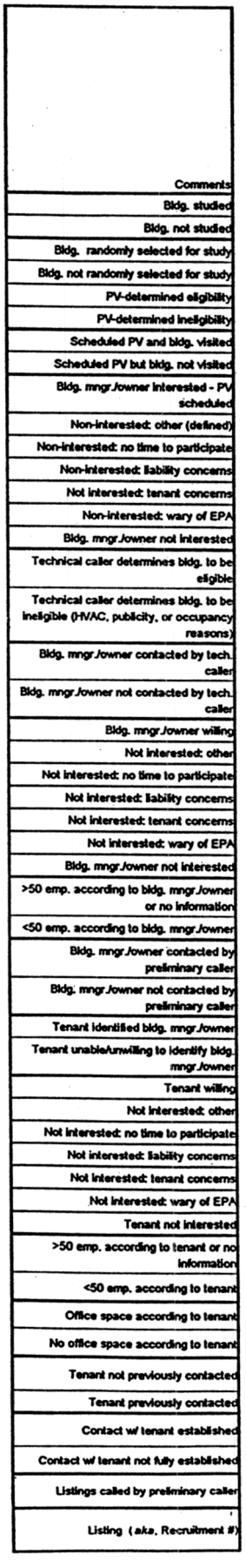
As part of our meeting, we would like to do a walk-through inspection of the building and the HVAC systems. We will also like discuss issues relating to interior and exterior pesticide use and the use of domestic cleaning materials.

Thank you in advance for your efforts.

Environmental Health & Engineering, Inc
60 Wells Avenu
Newton, MA 02159-321
TEL (617) 964-8550 FAX (617) 964-855
EMAIL EHE1@AOL.COI

APPENDIX F

STATISTICAL REPORT


Comments
Bldg. studied
Bldg. not studied
Bldg. randomly selected for study
Bldg. not randomly selected for study
PV-determined eligibility
PV-determined ineligibility
Scheduled PV and bldg. visited
Scheduled PV but bldg. not visited
Bldg. mngr./owner interested - PV scheduled
Non-interested: other (defined)
Non-interested: no time to participate
Non-interested: liability concerns
Not interested: tenant concerns
Non-interested: wary of EPA
Bldg. mngr./owner not interested
Technical caller determines bldg. to be eligible
Technical caller determines bldg. to be ineligible (HVAC, publicity, or occupancy reasons)
Bldg. mngr./owner contacted by tech. caller
Bldg. mngr./owner not contacted by tech. caller
Bldg. mngr./owner willing
Not interested: other
Not interested: no time to participate
Not interested: liability concerns
Not interested: tenant concerns
Not interested: wary of EPA
Bldg. mngr./owner not interested
>50 emp. according to bldg. mngr./owner or no information
<50 emp. according to bldg. mngr./owner
Bldg. mngr./owner contacted by preliminary caller
Bldg. mngr./owner not contacted by preliminary caller
Tenant identified bldg. mngr./owner
Tenant unable/unwilling to identify bldg. mngr./owner
Tenant willing
Not interested: other
Not interested: no time to participate
Not interested: liability concerns
Not interested: tenant concerns
Not interested: wary of EPA
Tenant not interested
>50 emp. according to tenant or no information
<50 emp. according to tenant
Office space according to tenant
No office space according to tenant
Tenant not previously contacted
Tenant previously contacted
Contact w/ tenant established
Contact w/ tenant not fully established
Listings called by preliminary caller
Listing (aka, Recruitment #)